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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/001,458	11/13/2001	Calvin K. McDonald	5087-36	3294	
20575 75	590 01/29/2004		EXAM	EXAMINER	
MARGER JOHNSON & MCCOLLOM PC 1030 SW MORRISON STREET			LAMB, TWY	LAMB, TWYLER MARIE	
PORTLAND,			ART UNIT	PAPER NUMBER	
			2622	6	
			DATE MAILED: 01/29/2004	, J	

Please find below and/or attached an Office communication concerning this application or proceeding.

7

•		Application No.	Applicant(s)			
•		10/001,458	MCDONALD, CALVIN K.			
	Office Action Summary	Examiner	Art Unit			
		Twyler M. Lamb	2622			
Period fo	The MAILING DATE of this communication a	appears on the cover sheet with the	correspondence address			
A SHOTHE No. 1 Exter after If the Failu Any r	ORTENED STATUTORY PERIOD FOR REPAIR MAILING DATE OF THIS COMMUNICATION asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by stately received by the Office later than three months after the mand patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be til reply within the statutory minimum of thirty (30) day iod will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE	mely filed  ys will be considered timety. In the mailing date of this communication.  ED (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 03	3 November 2003.				
2a)⊠	This action is <b>FINAL</b> . 2b) Th	nis action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	4)  Claim(s) 2-25 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 2-25 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.					
	on Papers	aror dicodon requirement.				
9) 🗌 10) 🔲	The specification is objected to by the Exam The drawing(s) filed on is/are: a) a Applicant may not request that any objection to t Replacement drawing sheet(s) including the corr The oath or declaration is objected to by the	accepted or b) objected to by the the drawing(s) be held in abeyance. Se rection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
	inder 35 U.S.C. §§ 119 and 120	LAdminer. Note the attached Office	ACION ON ONLY 10-132.			
12) \( \begin{array}{c} \times \text{S} \\ 13) \( \begin{array}{c} A \\ \text{S} \\ \text{S} \\ \text{S} \\ \text{A} \\ \text{S} \\ \text{A} \\	Acknowledgment is made of a claim for fore All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the papplication from the International Burksee the attached detailed Office action for a lacknowledgment is made of a claim for dome ince a specific reference was included in the 7 CFR 1.78.  1. The translation of the foreign language acknowledgment is made of a claim for dome acknowledgment is made of	ents have been received. ents have been received in Applicatoriority documents have been receive eau (PCT Rule 17.2(a)). list of the certified copies not receive estic priority under 35 U.S.C. § 119( first sentence of the specification of provisional application has been recestic priority under 35 U.S.C. §§ 120	ion No ed in this National Stage ed. (e) (to a provisional application) r in an Application Data Sheet. ceived. 0 and/or 121 since a specific			
Attachment	t(s) e of References Cited (PTO-892)	4) Interview Summer	/ (PTO-413) Paper No(s)			
2) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s	5) Notice of Informal I	Patent Application (PTO-152)			

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### Notice to Applicant (s)

- 1. This action is responsive to the following communications: amendment A filed on 11/3/03.
- 2. This application has been reconsidered. Claims 2-25 are pending.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the digital delay circuit" in line 1. There is insufficient antecedent basis for this limitation in the claim.

#### **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 23 of U.S. Patent No. 6,362,898. Although the conflicting claims are not identical, they are not patentably distinct from each other. In claim 23 of the current, the applicant uses the phraseology "a clock skew synchronizer for aligning subpixels in a print engine with a line synchronization signal comprising: a digital delay circuit outputting multiple subclocks according to a native pixel clock signal, the multiple subclocks each skewed at multiple different percentages of the native pixel clock period; multiple registers each having a data input coupled to a different one of the subclocks for shifting subpixel values to multiple different subpixel percentages within the same native pixel clock period; an edge detector coupled to data outputs of the multiple registers, the edge detector generating a shift value according to which of the multiple registers first detect actuation of the line synchronization signal; and a shift register shifting the subpixels into alignment with the line synchronization signal according to the shift value" which can be interpreted to be a broader statement of "a clock skew synchronizer for aligning subpixels in a print engine with a line

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synchronization signal comprising: a digital delay circuit outputting multiple subclocks according to a native pixel clock signal, the multiple subclocks each skewed at different percentages of the native pixel clock period; multiple registers each having a data input coupled to a different one of the subclocks for shifting subpixel values to multiple different subpixel percentages within the same native pixel clock period; and a clock input coupled to the line synchronization signal; an edge detector coupled to data outputs of the multiple registers, the edge detector generating a shift value according to which of the multiple registers first detect actuation of the line synchronization signal; and a shift register shifting the subpixels into alignment with the line synchronization signal according to the shift value" as stated in claim 15 in the previously issued patent {U.S. 6,362,898}.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during the prosecution of the application which matured into a patent.

### Allowable Subject Matter

Claims 2-25 essentially contain allowable subject matter. Referring back to Application No. 09/076,754. The applicant added the distinct features "during each native pixel clock period that are each skewed at different position percentages of the native pixel clock according to different combinations of the multiple subclocks thereby providing multiple subpixel output resolution within the native pixel clock period".

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The Examiner understands the "a digital delay circuit outputting multiple subclocks according to a native pixel clock signal, the multiple subclocks each skewed at multiple different percentages of the native pixel clock period" of the current application to be a broader statement of the same. Therefore claims 2-25 would be allowable upon filing a terminal disclaimer.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler Lamb whose telephone number is 703 - 308-8823. The examiner can normally be reached on M-TH (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-308-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, DC 20231

or faxed to:

(703) 872-9314

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington. VA.
Sixth Floor (Receptionist)

Twyler Lamb

January 25, 2004